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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,559	07/25/2003	Haruko Toyoshima	0445-0339P	9344
2292	7590	04/03/2006	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			HILL, LAURA C	
PO BOX 747				
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
			3761	

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/626,559	TOYOSHIMA ET AL.
	Examiner	Art Unit
	Laura C. Hill	3761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 26 January 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-5 and 7 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-5 and 7 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892). 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

**DETAILED ACTION*****Response to Arguments***

Applicant's arguments filed 25 January 2006 have been fully considered but they are not persuasive.

In response to Applicant's argument that Alemany does not disclose a motivation to modify flexural stiffness and absorption capacity ratios (see Remarks pages 9-11), Alemany discloses absorbent core 28 may be manufactured in a variety of sizes and shapes such as rectangular, hourglass, T-shaped, and asymmetric (column 9, lines 10-16) which would inherently have varying absorption capacities in different portions of the absorbent core. Alemany further discloses the absorbent core may have varying caliper zones, a hydrophilic gradient, superabsorbent gradient or lower average density and lower average basis weight acquisition zones so that the core can be compatible with designed loading and intended use of diaper 20 (column 9, lines 22-30). Absorbent core with varying caliper/thickness and/or lower average basis weight acquisition portions could thus be modified with the flexural stiffness values to vary resistance to compression for improved conformity to wearer's body regardless of the wearer's position. Alemany thus teaches motivation to optimize the absorption capacity ratio and flexural stiffness values with a reasonable expectation of success.

Furthermore, it is noted that there is also a motivation to modify the waist elastic member length as taught by Alemany. Alemany discloses elasticized waistband 35 comprises a *portion* of top sheet 24 and a *portion* of back sheet 26 (column 7, lines 51-53), the elastomeric members 76 in the waist elastics may have varying widths and

lengths (column 23, lines 40-41), and the elastic waist feature conforms to wearer's waist as the wearer sits, stands, or moves (column 51, lines 61-67).

***Claim Rejections - 35 USC § 112***

The rejection of claim 4 under 35 USC 112, second paragraph has been withdrawn upon further consideration. It is noted that claim 4 is interpreted to mean the longitudinal ends of the absorbent member are about substantially equal distances from the longitudinal diaper ends as clarified by Applicant on page 6 Remarks.

***Claim Rejections - 35 USC § 102/103***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-4 and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Alemany et al. (US 5,234,423; herein 'Alemany'). Regarding claim 1 Alemany discloses a disposable diaper 20 comprising an absorbent core member 28 positioned between a liquid pervious top sheet 24 and a liquid impervious back sheet 26 (col. 6, ll. 38-42) [Note the containment assembly 22 forms the 'main body' of the diaper-i.e. the top sheet 24, back sheet 26 and core 28]; said diaper 20 having a pair of longitudinal side and end sections each having a side edge, a crotch section located in the area between the longitudinal end

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sections (col. 6, ll. 63-col. 7, line 2, figure 1), and fastening tapes 42 provided on each side edge of the longitudinal end section (col. 6, ll. 48-51, col. 27, ll. 50-59, figure 1); wherein, the longitudinal end section having fastening tapes 42 has a waist elastic member 34 to form an elastomeric member/extensible waist part 76 (col. 6, line 45, figure 1); the longitudinal end section having fasten fastening tapes 42 with side panel members/extensible side part 90 formed in an area at and below the waist portion (col. 46, ll. 58-68, figure 1); the longitudinal end of the absorbent member 28 having fastening tapes 42 is nearer to the waist portion of that section than a centerline 66 that divides the side parts of diaper 20 into equal halves (col. 7, ll. 12-15, figure 1); a width of the absorbent member 28 located between the side parts is greater than the absorbent member width at the crotch section, forming a narrowing hourglass absorbent member (col. 9, ll. 10-16, figure 1). Alemany further discloses there is 30% less absorbency in the front waist region due to the dual layer core (col. 14, ll. 20-27) and further discloses the absorbent article inherently having the absorption capacity ratio, flexural stiffness and elastic length values. When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP §§ 2112- 2112.02.

Alternatively, Alemany does not expressly disclose saturation capacity ratio, absorbent member flexural stiffness, or elastic natural length values. Saturation capacity ratio is a result-effective variable since it is dependent on the amount of absorbent used

in the diaper. Flexural stiffness is a result-effective variable since it is dependent on the materials used in the absorbent member, etc. Elastic natural length is a result-effective variable since it is dependent on the size of the waist elastic member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Alemany with the aforementioned values, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch and Slaney*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 2 Alemany discloses side panel members/extensible side part 90 may comprise strands of elastomeric materials disposed in the side parts and in waistband 35 and located between the two basal parts of tape fastener 92 (col. 47, II. 38-46, figure 1).

Regarding claims 3 and 7 Alemany discloses tape tab fastener 92 joined to back sheet 26 and a further comprises a release portion 95 joined to top sheet 24 of diaper 20 (col. 29, II. 25-26, II.36-42, figure 1). Alemany further discloses the plurality of elastic members in the side part disposed between the basal parts of the fastener tapes as discussed above with respect to claim 2.

Regarding claim 4 Alemany discloses the two halves of diaper 20 formed by centerline 66 that are substantially equal in size to one another (figure 1).

#### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alemany et al. (US 5,234,423; herein 'Alemany') in view of Breitkopf (US 5,034,008; herein 'Breitkopf'). Alemany discloses the waist elastomeric member 76 and side panel members/extensible side part 90 as discussed above with respect to claims 1 and 2. Alemany et al. further discloses the side panel members/extensible side part 90 may comprise polyurethane foams to conform to the waist of the wearer as the wearer sits, stands or moves (col. 47, ll. 53-66, col. 51, ll. 62-67). Alemany *does not expressly disclose* the waist elastic member comprise urethane foam. Breitkopf discloses disposable diaper 10 with waist elastic element 28 made of polyurethane foam for enhanced comfort and containment (col. 1, ll. 57-61, col. 5, ll. 66-68, col. 6, ll. 8-18, figure 1). It is well known to those of ordinary skill in the art that polyurethane contributes to contraction and expansibility for use with nether garments as taught by McGuire (US 3,312,981). One would be motivated to modify the waist elastic member of Alemany et al. with polyurethane foam of Breitkopf since both references disclose disposable diapers with waist elastic elements that contract for improved fit. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the waist elastic member, thus providing a waist elastic member comprising urethane foam.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C. Hill whose telephone number is 571-272-7137. The examiner can normally be reached on Monday through Friday (off every other Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Laura C. Hill  
Examiner  
Art Unit 3761

LCH

*LCH*

TATYANA ZALUKAEVA  
SUPERVISORY PRIMARY EXAMINER

*Tatyana Zalukaeva*



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EXAMINER

ART UNIT      PAPER

20060328

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Commissioner for Patents